

ABSTRACT

A semiconductor plastic package excellent in heat diffusibility and free of moisture absorption, is structured by fixing a semiconductor chip on one surface of a printed circuit board, connecting a semiconductor circuit conductor to a signal propagation circuit conductor formed on a printed circuit board surface in the vicinity thereof by wire bonding, at least connecting the signal propagation circuit conductor on the printed circuit board surface to a signal propagation circuit conductor formed on the other surface of the printed circuit board or a connecting conductor pad of a solder ball with a through-hole conductor, and encapsulating the semiconductor chip with a resin. The printed circuit board has a metal sheet of nearly the same size as the printed circuit board and is nearly in the center in the thickness direction of the printed circuit board. The metal sheet is insulated from front and reverse circuit conductors with a heat-resistant resin composition, and the metal sheet is provided with a clearance hole having a diameter greater than a diameter of each of at least two through holes. The through-holes are provided in the clearance hole, and a through-hole or through-holes are insulated from the metal sheet with a resin composition, with at least one through-hole being connected to the metal sheet. One surface of the metal sheet is provided with at least one protrusion portion which is of the same size as the semiconductor chip and exposed on a surface, and the semiconductor chip is fixed on the protrusion portion.